

APPENDIX E

SEDIMENT RESULTS AND DATA

Table E-1
Sediment Sample Collection Information and Visual Classification Results

Station	Sample ID			Depth Interval	Date	Time	Method	Total Penetration (cm)	Interval Sampled (cm)	Description	Area Description (if collected via diver or evaluated visually)
BWE-9	BWE	9	SD	A	9/4/2003	1540	Van Veen	12	0-10	sand with silt	N/AP
10	AN	10	SD	A	9/3/2003	1510	Van Veen	15	0-10	coarse sand	N/AP
11	AN	11	SD	A	9/6/2003	1650	Diver	10	0-10	coarse sand with gravel	coarse sand with gravel throughout
11	AN	11	SD	B	9/5/2003	1150	Core	51.5	10-20	sand with gravel	N/AP
11	AN	11	SD	C	9/5/2003	1150	Core	51.5	20-30	sand with gravel	N/AP
11	AN	11	SD	D	9/5/2003	1150	Core	51.5	30-40	sand with gravel	N/AP
11	AN	11	SD	E	9/5/2003	1150	Core	51.5	40-51.5	sand/gravel & wood waste	tan organic material w/ wood fiber/pulp
12	AN	12	SD	A	9/6/2003	1730	Diver	10	0-10	sand with gravel	coarse sand with gravel throughout
13	AN	13	SD	A	9/6/2003	1100	Diver	10	0-10	sandy silt with some gravel/cobble	cobble with gravel and silt throughout area
14	AN	14	SD	A	9/3/2003	1210	Van Veen	0-3	0-3	coarse to medium sand	visually similar throughout area
15	AN	15	SD	A	9/3/2003	1240	Van Veen	0-3	0-3	coarse to medium sand	visually similar throughout area
20	AN	20	SD	A	9/6/2003	1800	Diver	0-10	0-10	sand with gravel	visually similar throughout area; swam compass to existing deposit and sediments did not change until the slope went back down to the existing deposit
21	AN	21	SD	A	9/6/2003	1220	Diver	0-10	0-10	sand with gravel	gravelly sand throughout area; very consistent
22	AN	22	SD	A	9/6/2003	1235	Diver	0-10	0-10	sand with gravel	gravelly sand throughout area
23	AN	23	SD	A	9/6/2003	1320	Diver	0-10	0-10	sand with gravel	gravel with sand throughout area; same substrate 10' N and S of station
24	AN	24	SD	A	9/6/2003	1340	Diver	0-8	0-8	sand with gravel	gravel with sand throughout area; similar substrate 20' S and 10' N
25	AN	25	SD	A	9/6/2003	1450	Diver	0-8	0-8	gravel/sand surface with silty/organic wood waste (wood fiber) material beneath; pulp mill odor	sand and gravel with wood waste (mechanically processed fiber similar to sawdust) and clayey sand intermixed; very heterogeneous station
26	AN	26	SD	A	9/6/2003	1510	Diver	0-6	0-6	dense silty sand	dense silty sand throughout area

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Station	Sample ID			Depth Interval	Date	Time	Method	Total Penetration (cm)	Interval Sampled (cm)	Description	Area Description (if collected via diver or evaluated visually)
27	AN	27	SD	A	9/6/2003	1600	Diver	0-10	0-10	gravel/cobble with sand	gravel/cobble with sand throughout area
28	AN	28	SD	A	9/3/2003	1545	Van Veen	0-15	0-10	coarse sand	N/AP
29	AN	29	SD	A	9/6/2003	1635	Diver	0-10	0-10	gravel with sand	gravelly sand throughout area
30	AN	30	SD	A	9/5/2003	1815	Diver	0-10	0-10	gravel with sand	cobble slope with organic mat in places (probably wood fiber), sloping to woody debris with sandy gravel substrate
31	AN	31	SD	A	9/5/2003	1800	Diver	0-10	0-10	cobble/gravel with silty sand	woody debris, large cobble to silty sand substrates present, sand with sandy silt underneath sampled
32	AN	32	SD	A	9/5/2003	1728	Diver	0-10	0-10	gravel with sand	boulder slope with gravelly sand at toe of slope
40	AN	40	SD	A	9/3/2003	1010	manual	0-10	0-10	sandy silt	similar substrate throughout area
40	AN	40	SD	B	9/5/2003	1100	Core	0-15	10-15	sandy silt w/ organic material	N/AP
41	AN	41	SD	A	9/3/2003	1045	manual	0-10	0-10	coarse to medium sand w/ silt	N/AP
42	AN	42	SD	A	9/3/2003	1120	manual	0-10	0-10	coarse to medium sand w/ silt	N/AP

diver = scuba diver grab sampler

manual = collected in shallow water using stainless steel spoon

core = piston core

**Table E-2
Core Information and Observations**

Station	Date	Time	Method	Total Penetration (cm)	Core Successful?	Description
11	9/5/2003	1140	Piston	70	No	apparent gravel deposit
11	9/5/2003	1145	Piston	40	No	apparent gravel deposit
11	9/5/2003	1150	Piston	51.5	Yes	gravel with coarse to medium sand; brown surface
14	9/5/2003	1430	Piston	10	No	dense sand with gravel
14	9/5/2003	1435	Piston	10	No	dense sand with gravel
14	9/5/2003	1440	Piston	10	No	dense sand with gravel
21	9/4/2003	1710	Piston	44	No	apparent gravel deposit; sediments are not retained in core upon retrieval
21	9/4/2003	1730	Piston	101	No	apparent gravel deposit; sediments are not retained in core upon retrieval
21	9/4/2003	1745	Piston	195	No	apparent gravel deposit; sediments are not retained in core upon retrieval
23	9/4/2003	1610	Piston	0	No	unable to penetrate sediment
23	9/4/2003	1612	Piston	0	No	unable to penetrate sediment
23	9/4/2003	1614	Piston	0	No	unable to penetrate sediment
29	9/4/2003	1815	Piston	100	No	apparent large gravel deposit; no sediment retained in core
29	9/4/2003	1820	Piston	75	No	apparent large gravel deposit; no sediment retained in core
29	9/4/2003	1825	Piston	50	No	apparent large gravel deposit; no sediment retained in core
30	9/5/2003	1220	Piston	30	No	dense gravel/sand; no sediment retained in core
30	9/5/2003	1230	Piston	40	No	dense gravel/sand; no sediment retained in core
30	9/5/2003	1235	Piston	20	No	dense gravel/sand; no sediment retained in core
31	9/5/2003	1310	Piston	0	No	hard substrate encountered (cobble?); no penetration
31	9/5/2003	1313	Piston	0	No	hard substrate encountered (cobble?); no penetration
31	9/5/2003	1316	Piston	0	No	hard substrate encountered (cobble?); no penetration
32	9/5/2003	1330	Piston	0	No	hard substrate encountered (cobble?); no penetration
32	9/5/2003	1335	Piston	0	No	hard substrate encountered (cobble?); no penetration
32	9/5/2003	1340	Piston	0	No	hard substrate encountered (cobble?); no penetration
40	9/5/2003	1500	Piston	15	Yes	organic (plant) material prevented further core penetration

piston = piston core

Table E-3
Results from Ecology's Analysis of Split Samples

Location ID Sample ID Sample Date Field QC	BWE-1 OD03-SS-01 5/21/2003	BWE-6 OD03-SS-06 5/21/2003	BWE-7 OD03-SS-07 5/21/2003	BWE-10 OD03-SS-09 5/21/2003
Depth Interval (cm)	~0-10	~0-10	~0-10	~0-10
Water Depth (feet)	25.2	24.6	19.6	7.5
Conventional (%)				
Total Organic Carbon	NA	NA	NA	NA
Total solids	NA	NA	NA	NA
Grain Size (%)				
Gravel	0.4	2.1	53.9	19.8
Sand, Very Coarse	2.5	2.9	4.3	5.8
Sand, Coarse	5.7	7.9	4.4	18.2
Sand, Medium	12	32.6	10.1	50.1
Sand, Fine	39.3	32.8	15.3	5.3
Sand, Very Fine	16.2	10	6.4	0.3
Silt	17	8.1	3.9	0.5
Clay	6.6	3.6	2.1	0.1
Total PCBs (µg/kg dry)	315	275	169	460

µg/kg dry = micrograms / kilogram dry weight